



The Ground Plane

SOUTH BAY
AMATEUR RADIO
ASSOCIATION /
ARRL MEMBER CLUB
SINCE 1974

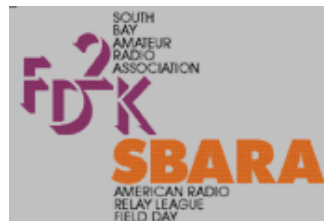


Volume 1 Edition 6

June, 2000

President's Message

by rudi wiedemann - kf6rlq



Looking at the calendar so far this year, I'm amazed at all the activities we've been able to achieve. The credit goes to our Leadership Team 2000, which makes this all come together somehow. A lot of work goes on 'behind the scenes' so to speak, from our Newsletter Editor Bill Artelt (WB9YVM) to our Web Master Tony Flusche (AB6BR).

I very much want to keep this momentum rolling for the second half of the year. We're blessed with a great diversity of member interests. But this diversity can be a double-edged sword. While ham radio today has so much to keep you interested and always learning, you can get a bit overwhelmed by all the sub-topics. Do I play with APRS, my new General class HF privileges, or maybe solar/QRP? But the fun is in the choices.

Same thing with the Club programs. This is where YOU come in! We need your active input in keeping Club activities fresh and vibrant. Whether you want

to merely suggest a workshop topic, or maybe coordinate a special event, we need your help to keep SBARA a great place to have fun.

So please chat with any of the Leadership Team members about your ideas.

Your efforts will be appreciated by all.

73s.....Rudi - KF6RLQ

**"keep this momentum
going for the second
half of the year" ...
Rudi**

June Program - Field day - 2000

by Alan Kritrell - KE6YKK

The regular monthly meeting for June 21 will be taken over for a last minute planning, organizing and training session in preparation for Field Day on June 24 & 25.

Our operating stations will be manned by a mixture of seasoned 'Old Pros' and many who are new to Field Day and contesting in general.

73sAlan Kritrell - KE6YKK

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**Look for SBARA on the
World Wide Web at:
<http://www.qsl.net/sbara>**

Field Day 2000

by Alan Kittrell - KE6YKK



The regular monthly meeting for June 21 will be taken over for a last minute planning, organizing and training session in preparation for Field Day on June 24 & 25.

Our operating stations will be manned by a mixture of seasoned 'Old Pros' and many who are new to Field Day and contesting in general. We want to have a chance to review the overall plans for the weekend, take a quick look at the rules for field day, and go over our station assignments and equipment availability. We are planning to operate more stations this year, that means more chance to interfere with each other, so this year we are going to try a band control method based on networking our stations. Each station will be keeping its log using the same 'CT' software that we have used in the past. The difference for this year is the network will limit access

to the log file for any mode/band (twenty meter CW for example) to one station. This automatically enforces the one station

at a time per mode/band rule for Field Day. CT is simple and efficient, and those who have never used logging software will want to use our Wednesday meeting as an opportunity to learn ahead of time.

Each of the Main station operating teams should prepare for Wednesday's meeting by going through their 'checklist' of station equipment and amenities so that we can do a quick review of what's needed and fill the gaps *before Saturday morning*. Those of you who have not been part of a station crew before will find this is a great way to learn what it takes to put together a station in the field. And for the 'Old Timers' it's a great way to avoid The Big Ops. As well as we can, we want to build a 'schedule' of who plans to operate at what station, and what times you will be available. If you are a station Chief Operator you will want to do a little recruiting ahead of time. If you want to try your hand as a guest operator, please let the Chief Operator of each station you want to operate know what you want to volunteer for. Remember, you don't need to be licensed to operate as a guest. If you plan on using your own computer for logging, it will need to be connected to our network That means you need a twisted pair (RJ45)

compatible network card and the associated network installation on your computer.

Rudi 'RLQ and James 'DDK are coordinating the networking, please contact them to make sure you a compatible with the system. As always, ahead of time is the best time for debugging.

Now that we have the 'Technical' part covered, lets go over the Fun. Harry Lau is our food organizer for this year. If you plan to attend, he wants to know. How many people to feed is part of his job, and coordinating pot luck dishes and SBARA barbecue preparation is a lot easier if he knows you'll be there. Each member and family should plan on bringing a pot luck dish, Saturday meal time is 5

o'clock or so. Tables are going to be in short supply this year, so if you can bring something along it will help. Please let Harry 'QAK know what you are bringing.

**See You at Field Day - 2000
The Event of the Century....
It will be Fun !!!**

We have always had a great time operating and eating and visiting on Field Day, and we plan to do all three again this year! In addition, we will be having demonstration and information tables representing special interest areas like QRP and T-hunting. We have invited local radio related public service groups to join us for field day this year. This will be a great way to find out what others are doing with their radio skills in the community.

Please plan to attend Wednesday's meeting, and be sure to set aside plenty of time on Field Day weekend. This is our once a year opportunity to practice emergency station preparation and communications while presenting the benefits of ham radio as a hobby and as a public service to all of our Fremont neighbors. It has been a real adventure serving as field day chairman this year. I want to thank you all for you advice and your help.

**On The Bands...
Work any interesting
contacts on the
Low Bands?**

The “Three T’s” of Emergency Communications

By Doug Stinson – KG6ADR

Towers, Transceivers and Talking – “Three T’s” of emergency communication – were covered in a lively presentation by Paul Carlin, KE6NVU, at the May 20th SBARA workshop at the Fremont Community Center at Lake Elizabeth. In the Bay area, Paul is perhaps uniquely qualified to discuss emergency communications, with over 30 years of involvement in emergency services. He is Assistant Chief Radio Officer of the Auxiliary Communications Service (ACS) for the Coastal Region of the California Governor’s Office of Emergency Services (OES). The Coastal Region of the OES is a 15 County area stretching from Monterey to the Oregon

border. He is also ARES Emergency Coordinator for the ARRL’s East Bay Section, which is comprised of Alameda, Contra Costa, Napa, and Solano counties. During a stint with the Air Force he was a member of a Disaster Prepared Mobility Team (DPMT).

The Tower

The first step in effective communications is to have a good antenna, and to have it high! So the first thing we learned was how to build an emergency, or “jungle” tower. “Where do we want to raise our antenna?” Paul asked. “In the shade!” responded the audience, sweltering on one of the first hot days of the year.

Two types of towers were erected; both based on stackable aluminum tubes. The tubes are sufficiently short and light to be easily carried but can be stacked to form a tube of arbitrary length. The first tower consisted of a stake, which is pounded into the ground, attached to a hinge. The tubes slide over the hinge, and then the tower is raised and secured by at least three guy wires. “Don’t do what we did a few years ago at field day,” admonished Don Safer, KC6IPO, “attach the antenna to the mast and the coax to the antenna *before* raising the mast.” This mast system is available as a kit at local swap meets. The hinge allows the antenna to be mounted on a sloped surface, but is only good to a height of 30 feet or so.

To get greater height, the same type of tubes can be assembled into a tripod base with the help of a special fitting. The linear tower assembled above, without the stake and hinge, is placed on top of the tripod. By adding more tubes to each leg of the tripod, a tower 60 feet in height can easily be raised.

Many hints, from the mundane to the profound, were shared:

- To prevent adhesive ‘gunk’ from getting on your equipment, wrap tape around the items to be secured with the sticky side *out*, then double back over the tape with the sticky side *in*. The elasticity of the tape holds the items together, but the sticky gunk is sandwiched in the center! One slice of the knife is all that is required to disassemble equipment held together in this fashion.
- Hose clamps, 2 – 3” in diameter, are even better than duct tape for securing an antenna to a mast. (At least one of the two U-bolts that come with the antenna for this purpose is guaranteed to be missing!)
- Electric fence wire makes an inexpensive guy wire and re-bar inexpensive guy wire stakes. (Once again, Murphy’s Law states that the fancy guy wire and stakes that come with the tower kit will be missing during an emergency – or for a demonstration in front of an eager audience! Somehow, the re-bar – and the uglier the better – is more likely to stay with the tower kit!)
- Have several female-to-female UHF adapters in your “go pack” to allow lengths of shorter cable to be connected together. (The cable you brought is never long enough to reach from the antenna to the radio.) Also bring UHF to BNC or UHF to SMA adapters to allow HTs to be connected to the antenna.
- RG213 coax is preferred over RG8, even though it has slightly more loss, because it better survives harsh conditions, such as being dragged over rocks, due to a thicker and more rugged jacket.
- If you have access to AC power, string Christmas lights (bought at after-the-holiday sales) as the guy wires. This makes the guy wires visible so people don’t walk into them and gives the antenna a festive appearance! The DC output of most emergency generators is unregulated – do not use it to power your rig! Run a power supply off the AC output, or use the DC output to charge batteries, and run your rig off that.

The Transceiver

At the workshop we connected a portable repeater to the antenna we had just raised. The particular repeater we used was about the size of a large VCR and had an output of 10 watts on the 440 band.

Paul had programmed the repeater to operate at 444.000 MHz with a positive offset. Note that this frequency is not one of those allocated to repeaters in the band plan. Additionally, in the Bay Area all 2-meter and 440 band repeater frequency pairs are already allocated. So, were we operating illegally? No... band plans and repeater frequency coordination are both examples of voluntary cooperation within the amateur radio community to prevent chaos on the airwaves. For a special event, such as this workshop, and particularly during an emergency, setting up a repeater in what would normally be a simplex portion of the band is not only legal but acceptable amateur practice.

What would be unacceptable practice would be for the repeater to cause interference with other legitimate use of the airwaves. During the demonstration it was easy to determine that no one else was using this particular frequency pair. During a disaster, the airwaves are likely to be quite congested. For this reason the repeater is kept at a relatively low power. Even so, with 10 watts and our 20’ or so high antenna, we were probably covering almost all of Fremont and Union City.

Editors Note: Pictures of this exciting Emergency Communications Workshop are contained within this issue.

Talking

The best equipment in the world can not compensate for poor operating procedure. Paul spent a significant portion of the workshop going over what it takes to be a good net control operator. We heard a tape of a poor operator and a good operator, which was both humorous and enlightening. The poor net control operator was excited and excitable, passed extraneous (and therefore confusing) information, spoke rapidly, and did not give other stations a chance to respond. (And then closed the net because no one responded!) The good net control operator was a voice of calm and reason while coaching other stations to provide the required information — and nothing more.

The “Three T’s” of Emergency Communications (cont’d)

By Doug Stinson – KG6ADR

Paul described the difference between a Resource Net, a Tactical Net and what he called a “fun net”. Resource Nets are used to find the people and equipment needed and to assign those resources to tasks. The Resource Net is run by the Logistics group in an incident command structure. The Tactical Net conducts the business of the incident command, handling the traffic generated by the event or incident.

An example of a “fun net” would be the weekly Tri-cities ARES net held every Tuesday at 19:30 hours on 147.015+ MHz. Other examples would be nets set up to provide communications at events such as Primavera or the MS Walkathon. A fun net allows people to build their operating skills by practice and by making mistakes. A “fun net” can become serious, tactical net quickly when someone develops a medical emergency during, for example, a foot race where amateur radio operators are providing communication support. It is best to take every opportunity to participate in “fun nets” to avoid a “baptism by fire.”

The program concluded with a lively discussion of the benefits and drawbacks of packet radio for emergency communications. The accuracy of automatically printed messages, eliminating the “whisper-down-the-lane” effect, and the increased throughput offered by >1200-baud transmission rates make packet quite attractive. Packet also allows automatic relay of messages through intermediate stations, when the originator and recipient stations are not within range. On the downside, packet is more complex than voice. Fewer people (always in short supply in an emergency) will be capable of setting-up and operating a packet station. Voice net operation should always be available and practiced, regardless of the sophistication of the packet net you create.

SBARA 2000 Meeting Program and Workshop Schedule

Month	Meeting Program	Workshop
June	FIELD DAY TUTORIAL, LOGGING, OPERATING AND SETUP – ALAN KE6YYK DATE: JUNE 21 ST TIME: 7:30PM LOC: COMMUNITY CTR	SBARA FIELD DAY 2000 DATE: JUNE 24 – 25 TH TIME: START 24 TH 7:00AM POTLUCK DINNER 5:00PM LOC: LAKE ELIZABETH
July	RON ROSS'S TRIP TO ANARTICA WITH HIS AMATEUR RADIO WEATHER STATION. DATE: JULY 19 TH TIME: 7:30PM LOC: COMMUNITY CTR	None currently scheduled.
August		None currently scheduled.
September		None currently scheduled.
October		None currently scheduled.
November		None currently scheduled.
December	NO MEETING IN DECEMBER	CHRISTMAS BANQUET - HO HO HO !

Getting the cart behind the horse

By Doug Stinson – KG6ADR

With the successful participation of ham radio operators in the April BayNet Community Emergency Response Team (CERT) drill (see the quote from acting Division Chief Vic Valdes of the Fremont Fire Department elsewhere in this issue), the CERT ham community is organizing for future success. The hard work of people in CART, the CERT Amateur Radio Team, described in the May 2000 issue of **The Ground Plane** as a "semi-informal" organization, is largely responsible for the successes to date. Now, at a May 10th meeting of CERT members who have their amateur radio license, CART became a bit less informal, and changed its name to boot.

The new name is "**CERT Communications Team**", or **CERT COMM** for short. Anyone who has completed CERT training and has a valid amateur radio license becomes a member of CERT COMM by participating in its events.

The principle behind CERT is neighborhood self-sufficiency, so most of the "action" takes place at the neighborhood level, stimulated by District Coordinators. This year, for the first time, each District Coordinator appointed a District Communications Officer to assist them in meeting the emergency communications needs of their districts. One way to think of CERT COMM is as a "support group" for the District Communications Officers. To make this concept effective, CERT COMM is governed by a steering committee composed of those Communications Officers. The current Steering Committee members are Mike Wilson - KE6GAG (Alvarado), Joe Peterson - KE6YHG (Ardenwood), Brian (Centerville), Margaret (Decoto), Jim Lewis - Douglas Stinson - KG6ADR Wiedemann - KF6RLQ - KF6ZGH (Warm Springs). also has two non-voting, advisory members: Wong - KE6OGM (Past act-Mike Fung - WAAWI (ARES Coordinator for Fire).

A CERT COMM Coordinator COMM Coordinator, elected COMM membership at large, the steering committee. Doug Edgelow were elected to respectively.

"In our recent Baynet Drill, amateur radio working in concert with CERT District command staff demonstrated their ability to collect vital information from their Districts. They passed this intelligence on to the Fire and Police Field Operations Centers (FOCs) and from there, on to the City's EOC (Emergency Operations Center) to coordinate reports and requests. By incorporating amateur radio into our City's Disaster Management Operations plan we are able to expand our response and reporting capabilities far beyond what would be possible from our normal staffing for Fire and Police Departments. This is possible in a large part because of the dedicated efforts of volunteer amateur radio operators. The performance at the April 29, 2000 drill confirmed the tremendous service that amateur radio can provide to their community in a disaster."

-- Vic Valdes

Acting Division Chief, Fremont/Union City Fire Department

Krause - AD6MG
Edgelow - KG6ACU
KG6ADG (Irvington),
(Mission San Jose), Rudi
(Niles), and Ken Thomas
The Steering Committee
sory members: Ray
ing leader of CART) and
Assistant Emergency

and Assistant CERT
from and by the CERT
facilitate the meetings of
Stinson and Margaret
those two positions, re-

CERT COMM met again on May 31st to formally adopt its bylaws and to begin the brainstorming of activities for the coming year. While specific activities have not yet been selected, they are sure to include increasing the number of people who have both a ham license and have completed CERT training. Also high on the list will be providing for the continuing education of these CERT hams in emergency communication, both through CERT COMM-sponsored activities and through cooperation with other ham and emergency service organizations.

If you are interested in participating in CERT COMM, please send an e-mail to douglas_stinson@excite.com, or join us at a CERT COMM Steering Committee meeting. These meetings are held on the second Wednesday of each month at 7:30 PM at the Fire Administration Building, 39100 Liberty Street, Fremont. More information on the local CERT program can be found at <http://www.ci.fremont.ca.us/fire/cert-doc.html>.

Club Officer Reports

Secretaries Report

Elise - KF6TQB

Okay, I hereby declare that it is time to fire the current secretary (that would be me). After searching high, low, and in between, I have come to the conclusion that I filed the minutes in such a creative place that I will need to search for a few more months to find them. Of course by then no one will care about them so I have unilaterally decided to cease searching for them. I basically have no short-term memory any longer so the following may or may not be a concise dissertation on the meeting.

5/17/00 SBARA General Meeting Minutes

The meeting was called to order around 7:30 p.m. by President Rudi Wiedemann, KF6RLQ. Approximately 25 people attended the meeting. Al Rendon, WT6K, advised that:

- (1) The May Workshop will be on emergency communications and will be given by Paul Carlin,
- (2) The June meeting will be a program on getting the most out of Field Day. Alan Kittrell, KE6YKK will go over station etiquette and logging procedures, and
- (3) Al is also working on a "workshop" for sometime in the future that will be a tour of a computer museum which is "under construction."

The new SBARA shirts were shown off by some of the board members. They are available from the Keepsake Factory at NewPark Mall. The shop is on the second level near Mervyns. They cost \$28 for S, M, L, XL and \$30 for XXL, plus tax. It will probably take about a week to receive the shirt once you have ordered it. Having each member order the shirt directly eliminates the need for SBARA to front a sum of money, and for a member to haul the shirts to and from the meetings in hopes of selling them.



Refreshments were provided by Helen Wiedemann, KF6ZYB. Nils Holms, N1LS presented a very interesting program on satellite telephone communications.

Treasurer's Report

by Ted - N6BFO

Total cash assets 4/27/2000: \$3014.63
Income since then: \$ 76.08
Expenses: \$115.05
Current balance 5/31/2000: \$2975.66

Projected for June:
Income: \$ 30.00
Expenses: \$600.00

Name Badges

by Jim - KE6IVA

Any SBARA member who would like to obtain a Name Badge for Field day can do so by contacting Jim Wood.

The Badges are \$8.00 each and include both a pin and a clip for attaching to a shirt, blouse or jacket.

Jim Wood
KE6IVA
510-657-6234
42640 Palm Ave.
Fremont, CA 94539
jimjoann@pacbell.net

SBARA Board Meetings on Tuesdays Before the General Club Meetings. Please Plan on Attending.... 7:30PM see rudi - KF6RLQ for details.

Fremont Communications Volunteer - Meeting Minutes

by robin ney - kg6di

I. The meeting began at 1937 hours at the Fremont Fire Department Administration Building. Present were Jerry Ciruolo (EF6TQB), Heather Ovens-

der (KG6ADL), Robin Kinney (KG6DI), David Ward (VE7DWJ), Nancy Peterson (KF6HOI), Joe Peterson (KE6YHG), Antoinette Marchand (KA3RDV), Doug Stinson (KG6ADR), Ray Wong (KE6OGM), Jim Wood (KE6IVA), Mike Fung (WA6AWI) and Wayland Louie (KB6UOK).

II. Program:

The night's program was a presentation of the Response Information Management System (RIMS) by Fire Department Division Chief Valdes. Chief Valdes went over the basics of the Standardized Emergency Management System (SEMS) and how RIMS automates the forms used in SEMS. Originally developed as a Lotus Notes application, now NetRIMS provides the advantage of Internet access. Chief Valdes showed the terminal used to access the system through Lotus Notes and also used the same terminal to show NetRIMS.

III. Agency Reports:

- 1) Alameda County District –The next County Emergency Coordinator meeting is as yet unscheduled. More information to follow.
- 2) CERT Teams – Doug Stinson reviewed a May 10 organizational meeting where he and Margaret Edgelow were selected as coordinators. A meeting will be held on May 31 to schedule regular meetings of the CERT Comm group.
- 3) Fire Dept. – No report was given.
- 4) Hospitals -- Jim Wood checked into the Hospital Net on May 24 from Kaiser Fremont. The annual May Hospital drill has been moved to November.
- 5) Police Department –No report was given.
- 6) Red Cross – No report was given.
- 7) Schools – No report was given.

IV. Old Business:

- 1) Volunteer Time Reporting – The Disaster Service Worker registration submission deadline has passed. If you did not submit a form, contact Janet Valdes at 790-6691 for another copy. A reminder that the 7th of each month is the deadline for prior month volunteer hours was made. To submit hours, you may call Janet or e-mail her (Jvaldes@ci.fremont.ca.us), or submit a timesheet if you have one. Hours submitted after the 7th will not be accepted.
- 2) Net Control Duties -- Fremont is responsible for May 2000 Net duties. August will be the next month for primary responsibility. If you would like to operate the station at the Fremont Police Department, contact Wayland Louie or Jim Wood.
- 3) Training drill – On April 29, a training drill was conducted under the auspices of the CERT program. 58 operators

IV. Old Business: (contd.) participated. Amateur radio and Family Radio Service equipment was used. Simplex operations were conducted in conjunction with repeater usage. Some innovative operators even used UHF simplex for their operations. A packet test was successful from Ardenwood to the Police Department position. Many thanks to Mike Fung and Ray Wong for helping plan the drill.

4) Telephone tree – Jim Wood and Mike Fung have volunteered to assist Andy Mascsak (WD6CJK) in completing the telephone tree.

V. New Business:

- 1) Field Day 2000 – Jim Wood announced that a permit has been secured to use Central Park for this year's event, on June 24 and 25. Plan on attending this fun social event.

VI. Events:

- 1) CERT Comm Group – May 31, 2000 at the Fire Administration Building.
- 2) SBARA Meeting – June 21, 2000 at the Central Park Community Center.
- 3) Field Day – June 24-25, 2000 north of the Senior Center, at Paseo Padre Parkway and Sailway Drive.
- 4) Communication Volunteer meeting – June 28, 2000.

VII. Adjournment: The meeting adjourned at 2145 hours. The next meeting is scheduled for 7:30 p.m. on June 28, 2000 at a place to be determined. For more details on any of the items mentioned above, as well as the May meeting location, tune into the weekly 147.015 Tuesday night Net at 7:30 p.m.. Ask for details if none of the topics are discussed, or put out a request for more information.

May SBARA workshop Photographs



"Carlin Repeater 2": Paul Carlin ((KE6NVU) explains how to set up a portable repeater.

"Coax Connect": Attaching the coax to the antenna BEFORE it atop the tower is the Safer (KC6IPO) way.



"Tower Raising": The raising of the jungle tower proves the Amish have nothing over us!



"Thomson raiser tower": Ken Thomas (KF6ZGH) proves raising a jungle tower is as easy as inserting Tab A into Slot B.

12 Store Buying Power!



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Worlds First 4-band HT

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FULL COLOR LCD DISPLAY

IC-2800H Dual Band Mobile

Mounting Kit Included

- 2M-440MHz
- 9600 baud ready
- Band scope
- CTCSS encode/decode
- Selectable squelch attenuator
- 232 alphanumeric memories
- 3" TFT LCD disp
- NTSC video input

IC-Q7A Dual Band Transceiver

\$25 COUPON

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IC-T22A 5W, 2M Handheld

Shirt-Pocket Size Offers Fun on the Run!

- Shirt pocket small
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- Auto low power/power saver
- 80 memory channels
- VHF/UHF air band receive
- Auto repeater function
- Backlit display
- Die cast aluminum

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IC-T7H 6W, Dual Band Transceiver

Dual Bands at a Single Band Price!

- Easy operation!
- 2 M/440 MHz
- 9 DTMF memories
- 70 memories
- Great audio
- CTCSS encode/decode
- Auto repeater

IC-207H Dual Band Mobile

\$40 COUPON

- 2M/440 MHz
- Wide band rx (includes airband)
- 9600 BPS packet ready
- 45W VHF (2M), 35W UHF (440 MHz)
- CTCSS encode/decode
- 4 power settings per band

IC-R75 HF/50 MHz Base Receiver

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IC-R2 AM, FM, WFM Receiver

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IC-R10 All Mode Transceiver

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- All Mode: FM, WFM, AM, USB, LSB, CW
- "Real time" band scope
- Multiple scan modes
- 1000 memory channels

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- 6M/2M/440MHz
- Easy intuitive operation
- 123 memories
- 5W @ 13.5 V

IC-W32A Dual Band Transceiver

- Advanced 2M/440 MHz
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